

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number  
WO 2005/062702 A2

(51) International Patent Classification: Not classified (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SB, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/IB2004/004441

(22) International Filing Date: 21 October 2004 (21.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2003905774 21 October 2003 (21.10.2003) AU

(71) Applicant (for all designated States except US): SDS METAL CRAFT PTY LTD [AU/AU]; 21 Bannister Road, Canning Vale, 6155, WA (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MCINNES, Malcolm, Blacknell [AU/AU]; 47-51 Vulcan Road, Canning Vale, 6970, WA (AU). DAY, Toby [AU/AU]; 21 Bannister Road, Canning Vale, 6155, WA (AU). REDFERN, Mark [AU/AU]; 21 Bannister Road, Canning Vale, 6155, WA.

(74) Agent: MADDERNS; Level 1, 64 Hindmarsh Square, SA, Adelaide, 5000 (AU).

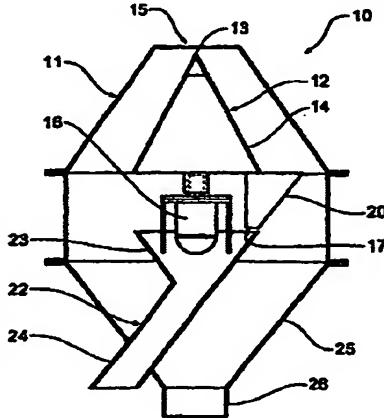
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

— without international search report and to be republished upon receipt of that report

{Continued on next page}

## (54) Title: AN IMPROVED ROTARY SAMPLE COLLECTOR



WO 2005/062702 A2

(57) Abstract: The invention relates to a sample collector apparatus (10) for collecting samples of flowable solid materials that comprises a housing (11) and a delivery opening (15) at the upper end of the housing (11) through which material to be sampled is delivered into the housing (11). A deflector (12) is located within the housing (11) and has an upper end (13) located below the delivery opening (15) and has an angled wall (14) that acts to deflect the material. A receptacle means (20) is located towards the lower edge of the deflector (12) for receiving a sample of the material flowing downwardly. The receptacle means (20) has an opening at (17) at its lower end through which the sample passes. Means 16 is provided for moving the receptacle means (20) with respect to the material flowing downwardly and a collection means (23) is located beneath the receptacle means (20) for collecting the sample from the opening (17) and a waste opening (26) is provided at the lower end of the housing (11) to discharge the portion of material not collected by the receptacle means (20). The invention provides a unique means of ensuring the random collection of a sample which is representative of the material as a whole that moves through the sample collection apparatus (10).